# AFSOC INSTRUCTION 99-102 1 March 2001

Test and Evaluation

#### OPERATIONAL TEST AND EVALUATION

# COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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Supersedes: AFSOCI 99-102, 2 October 1995 OPR: HQ AFSOC/XPT (Mr. David L. Simpson) Certified by: HQ AFSOC/XPT (Lt Col David J. Jay)

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This instruction implements AFPD 99-1, *Test and Evaluation Process*, and is subject to the provisions of AFI 99-102, *Operational Test and Evaluation*. It establishes policies and responsibilities for Air Force Special Operations Command (AFSOC) management, conduct, and support of operational test and evaluation (OT&E). It establishes relationships with other Department of Defense (DoD), United States Air Force (USAF), and government agencies in the conduct of test and evaluation (T&E). This instruction applies to all AFSOC organizations, gained Air Reserve Component (ARC) units upon mobilization, and when published in the respective Index 2 of the Air National Guard and Air Force Reserve.

#### **SUMMARY OF REVISIONS**

This document supersedes AFSOCI 99-102, 2 October 1995. The principle revisions are: the definition of follow-on operational test and evaluation (FOT&E) was modified; the new concept "Force Development Evaluation (FDE)" was added; AFSOC Form 93, **Test Request Form**, procedures were updated; the Air Force Special Operations Forces (AFSOF) combined test team (CTT) concept was added; the AFSOC Test Assessment Board (TAB) was established; the Financial Management Board (FMB) was established; and procedures to facilitate outside agency test requests were clarified.

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#### **Section A--General Information**

- **1. General Information.** AFSOC, a USAF major operating command (MAJCOM), requires operational test and evaluation (OT&E) of new or modified systems and equipment as a function of the weapon system acquisition and modification process. AFI 99-102, *Operational Test and Evaluation*, provides guidance and procedures for preparing, planning, and reporting of OT&E in the Air Force. The Test and Evaluation Division (HQ AFSOC/XPT) is AFSOC's single point of contact (POC) for test and evaluation (T&E) related matters.
- **2. Supplements.** 18th Flight Test Squadron (FLTS) supplements to this instruction require approval. Provide HQ AFSOC/XPT a copy of the draft supplement for approval.
- **3.** Changes. Forward recommended changes to this publication via AF Form 847, **Recommendation for Change of Publication**, to HQ AFSOC/XPT, 100 Bartley St, Hurlburt Field FL 32544-5273.

# **Section B--Policies and Concepts**

- **4. Policy.** This instruction emphasizes T&E of systems during development, acquisition, modification, employment, and provides direction for all T&E activities involving AFSOC resources or agencies. AFSOC T&E activities will be conducted within OPSEC, COMSEC, and security guidelines. The AFSOC test community will observe and/or participate in developmental test and evaluations (DT&E), or variations/activities thereof, or qualification test and evaluations (QT&E); and may accomplish OT&E of modified systems per guidance in AFI 99-102. The program management directives (PMD) or test and evaluation master plans (TEMP) for each system in acquisition or modification will typically specify AFSOC's T&E responsibilities. The purpose of AFSOC's participation in DT&E and/or QT&E is to gain operator and maintainer experience for OT&E, provide an early assessment of a system's operational effectiveness and suitability, and assist in identifying system deficiencies. Minimal duplication of testing will result.
- **5. Developmental Test and Evaluation.** Developmental programs and projects are undertaken by the special operations forces (SOF) system program office (SPO) in response to mission needs and/or deficiencies officially established by U.S. Special Operations Command (USSOCOM) or AFSOC. These programs are normally identified in the mission design series (MDS) specific PMD. The SOF SPO, Aeronautical Systems Center (ASC/LU), Wright-Patterson AFB, Ohio, or Warner Robins Air Logistics Center (WR-ALC/LU), Robins AFB, Georgia, is responsible for DT&E. Det 1, 46 OG generally conducts DT&E for AFSOC programs.
- **6. Operational Test and Evaluation.** The operational test agency (OTA) is usually specified in the PMD and/or TEMP. AFSOC will conduct OT&E of acquisition programs for which Air Force Operational Test and Evaluation Center (AFOTEC) determines their involvement is not warranted. AFSOC is responsible for conducting Force Development Evaluations (FDE), Tactics Development and Evaluation (DT&E), Operational Assessments (OA), and Operational Utility Evaluations (OUE). Additionally, AFSOC may be tasked to conduct initial operational

test and evaluations (IOT&E), qualification operational test and evaluations (QOT&E), and follow-on operational test and evaluations (FOT&E) for programs deferred by AFOTEC or as directed in the PMD.

- **7. Combined Testing.** In accordance with AFIs 99-101 and 99-102, a combined DT/OT&E approach operating in a combined test force (CTF) environment will be used to the maximum extent possible. Although not a true CTF, AFSOC regularly operates in a CTF-like environment. The resources, test events, and data for DT&E and OT&E are often similar; therefore, the opportunity exists for the integration of developmental and operational testing to improve overall test efficiency. However, the combined test approach must not compromise either developmental or operational test objectives.
- **8.** Combined Test Team (CTT). The AFSOF CTF-like environment is formed through the AFSOF CTT Charter, a memorandum of agreement (MOA). The AFSOF CTT Charter is a mutually agreed upon document between HQ AFSOC/XPT, Det 1, 46 OG, 18 FLTS, and AFOTEC OL-HF that establishes general guidelines for test planning and conduct. The objective of the AFSOF CTT Charter is to build early and complete integration of operational users, system contractors, support contractors, developmental testers, and operational testers in order to provide a smooth continuum of test efforts. HQ AFSOC/XPT is the POC for this document.
- **9. AFOTEC Conducted Tests**. The AFOTEC test resource plan (TRP) will identify AFSOC resources required to support AFOTEC conducted tests. HQ AFSOC/XPT coordinates requested resources with appropriate HQ AFSOC staff agencies and notifies AFOTEC of AFSOC's ability to provide the identified resources. HQ AFSOC/XPT, assisted by HQ AFSOC/DP, selects personnel to fill AFSOC test team authorizations. During an AFOTEC conducted OT&E, AFSOC team members function under the operational control of the AFOTEC test director. However, AFSOC retains command jurisdiction and administrative control of command resources. Written agreement between AFOTEC/CC and AFSOC/CC is required to establish specifics of administrative control. The HQ AFSOC/XPT test manager functions as the point of contact for AFSOC personnel supporting an AFOTEC conducted test.
- **10. Test Support Project.** In addition to the types of tests outlined in AFI 99-102, AFSOC conducts test support projects. Test support projects provide formal direction authorizing 18 FLTS involvement in acquisition programs being managed by another command or agency or in preparation for a subsequent OT&E. It authorizes use of AFSOC resources such as personnel and equipment. These projects permit attendance at program meetings and observation during developmental test activities. Support projects are also used to support OT&E conducted in joint environments.

## **Section C--T&E Management**

**11. HQ AFSOC/XPT.** HQ AFSOC/XPT manages AFSOC's T&E programs. As such, HQ AFSOC/XPT is the office of primary responsibility (OPR) for AFSOC's involvement in T&E activities.

- **12. HQ AFSOC/XPT Test Manager.** HQ AFSOC/XPT will designate a test manager for each T&E project. The test manager will execute staff management responsibilities for each assigned project from validation through publication of the final report or until the T&E effort is otherwise terminated. Additional responsibilities are provided in paragraph 36.
- **13. 18 Flight Test Squadron.** The 18 FLTS is an Operational Test Agency (OTA) and a direct reporting unit (DRU) to HQ AFSOC. The squadron is responsible for planning and conducting OT&Es on fixed wing and vertical lift aircraft, aircraft communications, fire control systems, munitions, command and control, software, defensive systems, personnel protective equipment, and air-deliverable loads. It provides test directors for each AFSOC T&E activity when tasked by HQ AFSOC/XPT. Additional responsibilities are provided in paragraph 40.
- **14. AFSOC Operational Units.** HQ AFSOC/DO tasks operational units within AFSOC to support OT&E activities. Units support specific tests by providing project officers. Project officers are responsible to the test director, or designated representative, for accomplishment of assigned duties as described in paragraphs 41 and 42.
- **15. Test Requirements.** A HQ AFSOC/XPT test order, HQ AFSOC approved test plan, and final report are required for each AFSOC conducted OT&E.
- **16. Modifications.** AFSOC aircraft and/or equipment will not be modified for test purposes without prior coordination with HQ AFSOC/XPT, validation by the AFSOC configuration review board (CRB), and approval from the appropriate Air Force Materiel Command (AFMC) single manager (SM). All requests for test article modifications to AFSOC possessed aircraft shall be initiated on an AF Form 1067, **Modification Proposal**, by the requesting agency and submitted to HQ AFSOC/LGM for entry into formal approval channels IAW AFI 21-101, *Maintenance Management of Aircraft*, and AFSOCI 10-601, *Operational Needs, Requirements, Concepts, and Modifications*.
- **17. Contractor Owned Equipment.** AFSOC OT&E of unsolicited contractor owned equipment requires special authorization from the Air Force Management and Equipment Evaluation Program office (OL-ZC AFMC-LSO/LOTM, Eglin AFB FL, DSN 872-4217). In addition, an approved AFSOC Form 93 is required.
- **18. AFSOC Form 93.** The AFSOC Form 93 is provided to help the requestor identify the information needed to validate and plan an OT&E. In some instances, some of the identified information is not known or available to the requestor. However, the requestor should obtain all data possible and is encouraged to submit a complete form. HQ AFSOC/XPT may assist in preparation. An AFSOC Form 93 submitted from field units must be signed by a wing/group commander. A HQ AFSOC directorate/division chief must sign the AFSOC Form 93 from HQ AFSOC requestors. Submit the signed AFSOC Form 93 to HQ AFSOC/XPT for test validation and approval. HQ AFSOC/XPT will then determine the type of test required and issue a test order to the 18 FLTS.
- **19. Test Results.** During T&E, AFSOC participants are not authorized to discuss the results of a test with noninvolved personnel or manufacturer representatives. They shall refer all inquiries

for information to the HQ AFSOC/XPT test manager. The intent of this policy is not to restrict the day-to-day dialogue necessary to conduct T&E but to ensure inappropriate conclusions and recommendations are not prematurely formed or released until data analysis is complete, and the final test report is published.

# **Section D--Categories**

- **20.** Categories. AFSOC OT&E normally falls into one of three categories: PMD initiated, USSOCOM and/or AFSOC initiated, and other service, MAJCOM, and/or government agency initiated.
- 20.1. Program Management Directive (PMD) Initiated Tests. The SOF SPO will provide HQ AFSOC/XPT the PMD and a Program Introduction Document (PID) within 30 days of program definition, which describes in detail the level of effort required for the project. A validated AF Form 1067 or similar requirements documents may also be used as authority for test initiation. The operational test agency (OTA) is usually specified in the PMD and/or TEMP. Requestors will prepare an AFSOC Form 93 to outline OT&E test requirements. The approved PMD, AF Form 1067, or similar requirements document serves as AFSOC approval and authority for test initiation.
- 20.2. USSOCOM and/or AFSOC Initiated Tests. The responsible program manager for USSOCOM initiated programs will obtain a HQ AFSOC directorate sponsor who will, in turn, prepare an AFSOC Form 93. For programs initiated by AFSOC, the requestor will prepare an AFSOC Form 93. An AFSOC Form 93 is submitted to HQ AFSOC/XPT within 30 days after program definition or no later than (NLT) 120 days prior to desired testing date. Each AFSOC Form 93 is staffed through the appropriate HQ directorates for approval.
- 20.3. Other Service, MAJCOM, and/or Government Agency Initiated Tests. Other Service, MAJCOM, and/or government agency programs that require the use of AFSOC resources will obtain a HQ AFSOC directorate sponsor. The sponsor will submit an AFSOC Form 93 to HQ AFSOC/XPT within 30 days after program definition or NLT 120 days prior to desired testing date. HQ AFSOC will approve all T&E plans and any subsequent revisions by other services, MAJCOMs, and/or government agencies requiring the use of AFSOC resources. The requesting service, MAJCOM, and/or government agency will submit the test plan and support request letter to HQ AFSOC/XPT for staffing NLT 60 days prior to desired test date.

#### **Section E--Test Assessment**

- **21. HQ AFSOC Test Assessment Board.** The AFSOC TAB is an essential element of the weapon systems integrated product team concept, and convenes on a quarterly basis to assess future program test requirements. HQ AFSOC/XPT chairs the TAB and coordinates with all applicable parties on the schedule. The formal establishment of the TAB is documented in the AFSOC CTT Charter.
- **22. Membership.** Permanent TAB members are HQ AFSOC/XPQ and XPT, AFOTEC OL-HF, 18 FLTS, and Det 1, 46 OG. Additional responsible test organizations and/or participating test

organizations identified in program documents will provide inputs to the TAB as advisory members. SPOs, AFSOC weapon system managers, DoD agencies/laboratories conducting Advanced Technology Demonstrations (ATDs) or Advanced Concept Technology Demonstrations (ACTDs) pertinent to SOF applications and/or the program initiating office are advisory members and will provide program introduction documents (PID) that include description, scope, cost, schedule, and approval level of production/fielding decisions.

**23. TAB Review.** The TAB will review the appropriate documents (i.e., PMD, PID, operational requirements document, etc.) to determine both DT and OT test requirements. The TAB will provide a consolidated test community input to the program managers on resources and test schedule requirements for incorporation into the overall program schedule.

## **Section F--Test Priorities**

- **24. HQ AFSOC Test Prioritization Board.** The HQ AFSOC TPB meets quarterly to define AFSOC T&E priorities. The TPB reviews and ranks validated test projects that require the use of AFSOC resources. TPB results are organized into a "Ranked by Precedence List" and a "Ranked by Priority List." These lists are a management tool only. HQ AFSOC/XPT will review contingency/urgent test requests individually, and determine whether TPB action is required. The TPB charter is provided in attachment 2.
- **25. Precedence.** Each AFSOC OT&E is assigned a T&E precedence rating. The test precedence rating is a management tool used for scheduling assets. The precedence rating is recommended by HQ AFSOC/XPT and coordinated with the affected HQ AFSOC staff agencies.
- 25.1. PRECEDENCE I. Requires HQ AFSOC/CC approval. Test activity supersedes HQ AFSOC/DO exercise commitments and unit training.
- 25.2. PRECEDENCE II. Requires HQ AFSOC/DO approval. Test activity supersedes unit training but not HQ AFSOC/DO exercise commitments.
- 25.3. PRECEDENCE III. Test activity is accomplished in conjunction with unit training.

#### **Section G--Documentation**

**26. Test Orders.** The HQ AFSOC/XPT test manager will prepare a test order or a test support order for each project. The test order is authorization for the 18 FLTS to execute required test activities.

#### 27. Test Plans.

27.1. An 18 FLTS test director prepares the test plan. The test plan describes in detail the test methodology, responsibilities, and resource requirements to execute a specific test. As a minimum, the resource requirements portion will include flying hours, munitions, and a rough

- order of magnitude (ROM) cost estimate broken down to major 18 FLTS cost components (temporary duty (TDY), range costs, test equipment, etc.).
- 27.2. HQ AFSOC, through HQ AFSOC/XPT, will approve test plans prior to implementation.
- 27.3. Test plans are prepared IAW the format prescribed in AFI 99-102 or as approved by HQ AFSOC/XPT. HQ AFSOC/XPT may authorize a memorandum or abbreviated format when timely completion is critical and/or the test is a small, uncomplicated effort. The test order specifies the format required.

# 28. Test Reports.

- 28.1. 18 FLTS will prepare and publish test reports. Reports will not be released outside government channels without HQ AFSOC/XPT approval. OT&E reports are exempt from report control symbol (RCS) licensing, IAW AFI 99-102.
- 28.2. The test director prepares interim summary reports when the final report cannot be completed within 45 days of a significant program decision and/or when directed by HQ AFSOC/XPT. This report summarizes OT&E results in sufficient detail to support program decisions. Interim summary reports are coordinated through HQ AFSOC/XPT and released within 10 working days from the date of request.
- 28.3. Final reports are submitted to HQ AFSOC/XPT for HQ AFSOC coordination within 60 days after the last test event. Final reports will be published and distributed after the 15-day staffing process is complete. Each final report will contain the findings of the test, to include a list of all system discrepancies tested and/or discovered, additional findings, observations, conclusions, and recommendations. HQ AFSOC/XPT may authorize either a memorandum or abbreviated format when timely completion is needed and/or the test was a small, uncomplicated effort. The AFSOC test order will specify the format required.
- 28.4. Status reports provide periodic updates and summaries of important findings during long-term OT&E projects. The test director will coordinate with HQ AFSOC/XPT and publish status reports in letter or message form with the contents tailored to individual program needs. Reporting frequency will be directed in the TEMP or test order.

## **Section H--Test Resources**

- **29. Guidance.** Budgeting guidance for OT&E is found in AFI 99-102, Chapter 6. For details on types of funds used and procedures, see AFI 65-601, Vol 1, *Budget Guidance and Procedures*, DoD Regulation 7000.14-R, Vol 2A, *Financial Management Regulation*, and AFI 99-109, *Test Resource Planning*.
- **30. Budget.** 18 FLTS manages and executes the AFSOC OT&E budget and has the authority to direct and obligate funds. The 18 FLTS will share all AFSOC OT&E financial information with HQ AFSOC/XPT.

- **31.** Emergency and Special Program (ESP) Code. HQ AFSOC/XPT will assign each test program an emergency and special program (ESP) code. An ESP code will be included in the fund citation on all obligating documents.
- **32. Expenditures.** 18 FLTS test programs using AFSOC O&M funds shall be subdivided into travel and per diem, contract (industrial funded test ranges, data analysis, peculiar test support, etc.), Special Assignment Airlift Mission (SAAM) support, supplies, personnel, and special equipment requirements cost. In addition, the 18 FLTS will identify the OT&E dedicated flying hours and munitions required for each MDS to HQ AFSOC/DO/XP/LG through HQ AFSOC/XPT.
- **33. Financial Management Board.** The 18 FLTS will conduct an FMB on a quarterly basis to review all AFSOC OT&E financial matters.
- **34. Foreign Materiel Program.** HQ AFSOC/XPT manages and executes the AFSOC Foreign Materiel Program funds and has the authority to direct and obligate expenses.
- **35. Manpower.** HQ AFSOC/XPT will identify additional OT&E manpower requirements to HQ AFSOC/XPM and XPP for inclusion in the program objective memorandum (POM) submission and, if necessary, for out-of-cycle funding.

## **Section I--Responsibilities**

- **36. HQ AFSOC/XPT.** HQ AFSOC/XPT will:
- 36.1. Establish and interpret T&E policy for AFSOC and ensure independent OT&E is conducted and reported.
- 36.2. Coordinate/approve test plans that use AFSOC or AFSOC gained resources prior to test start.
- 36.3. Attend all safety review boards (SRBs) and ensure SRBs are completed prior to test start.
- 36.4. Represent AFSOC at test related meetings, test plan working groups (TPWG), or conferences.
- 36.5. Review and coordinate T&E requests.
- 36.6. Review and coordinate support requests.
- 36.7. Designate a test manager for approved T&E projects.
- 36.8. Host a test order working group prior to issuing a test order to ensure test purpose, user requirements, critical operational issues, funding, priority, precedence, and time lines are understood by all affected agencies. Minimum representation will include the requesting organization and the operational test agency.

- 36.9. Assign a HQ AFSOC test number and ESP code to each approved OT&E.
- 36.10. Prepare OT&E POM submissions.
- 36.11. Serve as the SAAM validator for OT&E dedicated aircraft.
- 36.12. Provide inputs to congressional data sheets on OT&E matters when requested by HQ AFSOC, HQ USAF, USSOCOM, or DoD.
- 36.13. Serve as the HQ AFSOC staff OPR for joint and multi-service test matters.
- 36.14. Review staff packages for T&E requirements/issues.
- 36.15. Coordinate with other MAJCOMS, services, or government agencies for facilities, personnel, materiel, engineering, or information support for AFSOC conducted T&Es.
- 36.16. Present/sponsor formal briefings on T&E related matters to AFSOC command section, staff, and other organizations.
- 36.17. Manage the AFSOC Foreign Materiel Program and associated funding.
- 36.18. Serve as OPR for the AFSOF CTT Charter.
- 36.19. Attend the quarterly FMB held by 18 FLTS.

# **37. HQ AFSOC/DOO.** HQ AFSOC/DOO will:

- 37.1. Coordinate availability of SOF aircraft, aircrew, maintenance, and support for T&E.
- 37.2. Task the appropriate SOF units to provide required aircraft and aircrew resources identified in the AFSOC approved test plan or support request.

# **38. HQ AFSOC/DOX.** HQ AFSOC/DOX will:

- 38.1. Serve as the OPR for AFSOC TD&E.
- 38.2. Submit test requests for TD&E to HQ AFSOC/XPT at least 60 days prior to the desired test order issuance date.

## **39. HQ AFSOC Staff Agencies.** HQ AFSOC staff agencies will:

39.1. Coordinate with HQ AFSOC/XPT any analysis of alternatives (AoA), mission need statement (MNS), PMD, ORD, TEMP, and any other documents that pertain to the acquisition/modification of aircraft or aircraft related systems, support equipment, and command, control, communication, computer and intelligence (C4I) systems for T&E comments.

Additionally, provide copies to HQ AFSOC/XPT for program tracking and T&E management activities.

- 39.2. Prepare AF Form 1067 and obtain HQ AFSOC configuration review board (CRB) and AFMC SM approval for any aircraft modifications required to support T&E.
- 39.3. Review and comment on test requests, plans, and reports, when requested.

## **40. 18 FLTS.** 18 FLTS will:

- 40.1. Establish internal procedures and policies for supporting and/or accomplishing taskings from HQ AFSOC/XPT.
- 40.2. Execute an OT&E program independent of bias.
- 40.3. Designate a test director for assigned OT&E projects and exercise operational control over test team members.
- 40.4. Prepare a test plan for OT&E projects and forward the proposed plan in final format to HQ AFSOC/XPT for staff coordination and HQ AFSOC approval.
- 40.5. Conduct a safety review board (SRB) for all tests and forward results to HQ AFSOC/SE and XPT.
- 40.6. Immediately notify HQ AFSOC/XPT with documentation of problems or potential problems that might jeopardize or prevent accomplishment of a test.
- 40.7. Assume fiscal responsibility for allocated OT&E resources. 18 FLTS will provide to HQ AFSOC/XPT a copy of the 18 FLTS spend plan, Budget Execution Reports (BER), and any other documentation that HQ AFSOC/XPT requests.
- 40.8. Conduct a FMB on a quarterly basis.
- 40.9. Provide test reports for assigned test projects.
- 40.10. Maintain a project folder that portrays the history and status of each project.
- 40.11. Collect data and provide reduction, analysis, and presentations as required.
- 40.12. Prepare AF Form 1067 and obtain HQ AFSOC configuration review board (CRB) and AFMC SM approval for aircraft instrumentation modifications required to support T&E.
- 40.13. Brief test project plans/findings to HQ AFSOC command section, staff, and other agencies when requested. Provide copies of briefing graphics and script to HQ AFSOC/XPT for review NLT 3 working days prior to the scheduled presentation date.

- 40.14. Identify requirements and submit test support requests to HQ AFSOC/XPT and test participating/supporting units.
- **41. AFSOC Operational Units.** When tasked, AFSOC operational units will:
- 41.1. Appoint a unit project officer for T&E projects.
- 41.2. Provide logistic, administrative, safety, and information support as specified in T&E related tasking documents.
- 41.3. Immediately notify HQ AFSOC/XPT and the involved test agency with supporting documentation if unable to support a T&E tasking.
- **42. Unit Project Officer.** Unit project officers will:
- 42.1. Inform unit commander of T&E support requirements.
- 42.2. Assist test manager and test director in planning, conducting, and reporting each test.
- 42.3. Coordinate unit resources and provide cost estimates to support T&E.

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#### Attachment 1

## **GLOSSARY OF TERMS**

**Acquisition Cycle.** Process through which new systems are developed and acquired by the Air Force. Normally, the structured procurement consists of four phases (Concept Exploration, Program Definition and Risk Reduction, Engineering and Manufacturing Development, and Production, Fielding/Deployment, and Operational Support) with a milestone decision point at the end of each phase.

**AFSOC Test Director.** An individual normally assigned to 18 FLTS who is directly responsible for preparing the test plan, directing day-to-day activities associated with the conduct of the test, and writing the final report.

**AFSOC Test Manager.** An individual assigned to HQ AFSOC/XPT who is responsible for overall test management of a T&E program and for coordinating T&E-related documents within HQ AFSOC, higher headquarters, and other commands associated with the test. Normally, this individual prepares the Congressional Data Sheets, test order; staffs the test plan and report; and assists the test director when needed.

**Combined Test Force (CTF).** A CTF is an integrated T&E product team empowered to evaluate a weapon system, generally collocated at one primary test site under a unified command structure. Although the AFSOC CTF is not a true CTF as defined by AFI 99-102, AFSOC regularly operates in a CTF environment

**Concept Of Operations (CONOPS).** A verbal, graphic, and/or textual description, in broad outline, describing desired key capabilities in terms of operational employment and utility. Frequently embodied in campaign plans and operations. The concept is designed to give an overall picture of the operation. It is included primarily for additional clarity of purpose.

**Critical Operational Issue (COI).** A key question that must be examined in operational test and evaluation to determine the system's capability to perform its mission. Testers normally phrase a COI as a question to be answered in evaluating a system's operational effectiveness or suitability.

**Developmental Test And Evaluation (DT&E).** Test and evaluation conducted to evaluate design approaches, validate analytical models, quantify contract technical performance and manufacturing quality, measure progress in system engineering design and development, minimize design risks, predict integrated system operational performance (effectiveness and suitability) in the intended environment, and identify system problems (or deficiencies) to allow for early and timely resolution or correction.

**Follow-On Operational Test And Evaluation (FOT&E).** The continuation of IOT&E or QOT&E activities past the milestone III decision. FOT&Es answer specific questions about unresolved COIs and test issues, or completes areas not finished during the I/QOT&E. It ensures the initial system acquisition process is complete.

**Force Development Evaluation (FDE).** The evaluation, demonstration, exercise, or analysis of fielded, operational systems during the sustainment portion of the system life cycle. FDE focuses on the MAJCOMs' operational employment and sustainment of fielded systems after I/QOT&E, and/or FOT&E are complete.

**Initial Operational Test And Evaluation (IOT&E).** The operational test and evaluation conducted on production or production-representative articles to help decide whether to proceed beyond low-rate initial production. IOT&E is conducted to measure how well the system attains operational effectiveness and suitability.

**Interim Summary Reports.** Interim summary reports are prepared by the test director when the final report cannot be completed within 45 days of a significant program decision and/or when requested by HQ AFSOC/XPT. This report summarizes OT&E results in sufficient detail to support program decisions. Interim summary reports will be coordinated through HQ AFSOC/XPT and released within 10 working days from the date of request.

**Mission Need Statement (MNS).** A document prepared by users to identify a requirement for a material solution to satisfy a mission deficiency (DoD 5000.2-R and AFI 10-601). The MNS is prepared according to CJCSI 3170.01.

**Measure Of Effectiveness (MOE).** A qualitative or quantitative measure of a system's performance or a characteristic that indicates the degree to which it performs the task or meets a requirement under specified conditions. Where possible, MOEs should be defined to measure operational capabilities in terms of engagement or battle outcomes.

**Measure Of Performance (MOP).** A quantitative measure of the lowest level of physical performance. It reflects a system's technical capabilities and may be expressed in terms of speed, payload, range, time on station, survivability (susceptibility and vulnerability), or other distinctly quantifiable performance feature.

**Measure Of Suitability (MOS).** A qualitative or quantitative measure that indicates the degree to which a system can be placed satisfactorily in field use considering availability, compatibility, transportability, interoperability, reliability, wartime usage rates, maintainability, safety, human factors, manpower supportability, logistic supportability, natural environmental effects and impacts, documentation, and training requirements.

**Operational Assessment (OA).** An analysis of potential operational effectiveness and suitability made by an independent operational test activity, with user support as required, on other than production systems. The focus of an operational assessment is on significant trends noted in development efforts, programmatic voids, areas of risk, adequacy of requirements, and the ability of the program to support adequate operational testing. Operational assessments may be made at any time using technology demonstrators, prototypes, mockups, engineering development models, or simulations, but will not substitute for the independent OT&E necessary to support full production decisions.

**Operational Effectiveness.** The overall degree of mission accomplishment of a system used by representative personnel in the environment planned or expected for operational employment of the system considering organization, doctrine, tactics, survivability, vulnerability, and threat (including countermeasures, initial nuclear weapons effects, nuclear, biological, and chemical contamination threats).

**Operational Requirements Document (ORD).** A document prepared by the respective using command that describes pertinent quantitative and qualitative performance, operation, and support parameters, characteristics, and requirements for a specific candidate weapon system.

**Operational Suitability.** The degree to which a system can be placed satisfactorily in field use, considering availability, compatibility, transportability, interoperability, reliability, wartime usage rates, maintainability, safety, human factors, manpower supportability, logistic supportability, natural environmental effects and impacts, documentation, and training requirements.

**Operational Test Agency (OTA).** The command or agency designated by the program management directive (PMD) or other appropriate program directive as responsible for managing the independent OT&E of a system.

**Operational Test And Evaluation (OT&E).** Testing and evaluation conducted to estimate the system's military utility conducted in as realistic an operational environment as possible to estimate the prospective system's military utility, operational effectiveness and suitability. In addition, operational test and evaluation provides information on organization, personnel requirements, doctrine, and tactics. Also, it may provide data to support or verify material in operating instructions, publications, and handbooks.

**Operational Utility Evaluation (OUE).** Highly streamlined, flexible OT&E activities designed to obtain quick-look assessments of military worth. They are used anytime testing does not fall into one of the other major categories of OT&E. OUEs are highly flexible in planning and reporting formats, and adjustable to customer needs. They are conducted outside the normal scope of operational testing activities, and are limited in time, scope, and resources. They may be used when required information cannot be obtained from OT&E, but will not be used in lieu of IOT&E, QOT&E, or FOT&E.

**Participating Test Organization (PTO).** A test organization required to provide specific resources during DT&E or OT&E.

**Precedence.** Each AFSOC OT&E is assigned a T&E precedence rating. The test precedence rating is a management tool used for scheduling assets. Precedence rating recommendations take into account the scope, cost, urgency, mission need, and any other relevant factors. The precedence rating is recommended by HQ AFSOC/XPT and coordinated with the affected HQ AFSOC staff agencies before the test order is issued.

**Program Introduction Document (PI, also PID).** Documentation submitted to major range and test facilities as official test program notification of requirements.

**Program Management Directive (PMD).** The official Air Force document used to direct acquisition or modification responsibilities to the appropriate MAJCOM, PEO, or DAC for a specific system's and subsystem's development, acquisition, concept direction study, or modification. The PMD states the program's unique requirements, goals, and objectives, especially those to be met at each acquisition milestone or program review.

**Program Objective Memorandum (POM).** An annual submission Memorandum to the SECDEF from each military department and defense agency which proposes total program requirements for the next five years, and includes rationale for the planned changes from the approved FYDP baseline within the fiscal guidance.

Qualification Operational Test And Evaluation (QOT&E). Test and evaluation performed instead of initial operational test and evaluation on programs for which there is no research and development, per se.

**Qualification Test And Evaluation (QT&E).** Test and evaluation performed instead of developmental test and evaluation on programs for which there is no research and development, per se.

**Requirement.** Minimum level of performance or capability at planned system maturity describing a mature system value which will allow satisfactory accomplishment of the system's operational mission.

**Responsible Test Organization (RTO).** The lead government entity that is qualified and responsible for DT&E and/or QT&E.

**Safety Review Board (SRB).** A Safety Review Board is convened to assess the hazards associated with a test and assign a risk factor. The purpose is to ensure all aspects of safety are considered and documented in the test plan. The board can disapprove a test mission if the safety factors are considered unsatisfactory. All agencies involved in the test should be represented on the board.

**Single Manager** (**SM**). A government official (military or civilian) who is responsible and accountable for decisions and overall management (to include all cost, schedule, performance, and sustainment) of a system, product group, or materiel group. Also known as system program director, program manager, product group manager, or materiel group manager.

**Status Reports.** Status reports provide periodic updates and summaries of important findings during OT&E. The test director will submit status reports in letter or message form with the contents tailored for individual program needs. Reporting frequency will be listed in the TEMP or the test order.

**System Program Office (SPO).** The organization comprised of technical, administrative, and business management personnel assigned full time to a system program director. The office may be augmented with additional personnel from participating organizations.

**Tactics Development And Evaluation (TD&E).** TD&E is a subset of FDE specifically designed to further exploit system capabilities and tactics during the sustainment portion of the system's life cycle. It includes the research, demonstration, exercise, analysis, and evaluation of specific employment tactics against anticipated threats. TD&Es use the same policies and accomplish many of the same goals as FDE.

**Test And Evaluation (T&E).** The act of generating empirical data during the research, development or sustainment of systems, and the creation of information through analysis that is useful to technical personnel and decision makers for reducing design and acquisition risks. The process by which systems are measured against requirements and specifications, and the results analyzed so as to gauge progress and provide feedback.

**Test And Evaluation Master Plan (TEMP).** The basic planning document for all test and evaluation related to a particular system acquisition which is used in planning, reviewing, and approving test and evaluation. It is required for all major defense acquisition programs, all OSD oversight programs, all HQ USAF programs directed by a Program Management Directive, and may be required for an OSD-directed information system program. The TEMP integrates critical issues, test objectives, evaluation criteria, system characteristics, responsibilities, resources, and schedules for test and evaluation. (DoD Manual 5000.3-M-1)

**Test Order.** A formal HQ AFSOC tasking document that serves as the authority for an operational test agency to plan, conduct, and report on a test.

**Test Plan.** The formal document that provides the complete, detailed, coordinated, and integrated plan for the time-phased task of providing answers and solutions to the critical questions and areas of risk. It must also list the resources required to conduct, analyze, and report on the test.

**Test Plan Working Group (TPWG).** Assigned by the program manager to provide a forum for test-related subjects, assists in establishing test objectives and evaluations baselines, defines organization, responsibilities, and relationships, estimates costs and schedules, and identifies needed test resources. Normally, includes system program office (SPO) representatives, AFSC test agencies, contractors, AFOTEC, and using and supporting major commands (MAJCOM).

**Test Support Order.** Test support projects allow AFSOC test agencies to become involved in acquisition programs being managed by another command or agency, or in preparation for a subsequent OT&E. A test support project provides formal direction for use of AFSOC resources (such as personnel and equipment). It can identify long lead-time resources such as equipment, parts and personnel. These projects permit attendance at test-related meetings, observation in early developmental test activities, and preparation for subsequent AFSOC conducted or supported OT&E. Support projects can be used to support OT&E conducted in joint environments.

**Unit Project Officer.** An individual from the tasked operational unit, appointed by the unit commander to support the conduct of specific portions of the test.

#### **Attachment 2**

#### TEST PRIORITIZATION BOARD CHARTER

- **A2.1. Purpose.** The HQ AFSOC TPB meets quarterly to define AFSOC's T&E priorities. The TPB reviews all validated test projects that require the use of AFSOC resources. The board rank orders them into a "Ranked by Precedence List" and a "Ranked by Priority List." These lists are a management tool only.
- **A2.2. Organization.** HQ AFSOC/XPT chairs the TPB with voting members composed of representatives from HQ AFSOC/DOX, INX, LGM, SCP, SES, and XPQ. Each division will identify a primary and alternate representative to sit on the TPB. Any organization affected or impacted by tests under consideration by the TPB may serve as advisory members.

# **A2.3. Responsibilities:**

- A2.3.1. The chairman will:
- A2.3.1.1. Conduct all TPB meetings.
- A2.3.1.2. Act as the arbiter to gain consensus on test rankings.
- A2.3.1.3. Inform directorates of meeting times and locations.
- A2.3.1.4. Prepare approved test requirements packages for voting members.
- A2.3.1.5. Publish the TPB results.
- A2.3.2. The voting members will:
- A2.3.2.1. Complete test prioritization worksheet by rating each test and providing the worksheet to the chairman NLT two workdays prior to the TPB meeting.
- A2.3.2.2. Ensure the alternate attends the TPB meetings should the primary member be absent.
- **A2.4. Procedures.** The chairman will convene the TPB and provide each voting member a test fact sheet and a test prioritization worksheet at least 2 weeks prior to the meeting.

#### A2.5. Method.

- A2.5.1. The TPB board members will review each test individually and rate each test based on seven variables. Scoring is on a scale of 0 to 10 (0 being lowest; 10 being highest). For each test requirement, the members' scores for each variable are summed and the resulting sums are multiplied by the weighted factor for each variable. The test requirement score is then obtained by summing the weighted averages for all the variables. The test with the largest weighted average will have the highest priority.
- A2.5.2. The following are the seven variables of the test that are considered for this process:
- A2.5.2.1. Mission Impact. Improving degree of mission accomplishment.

- A2.5.2.2. Logistics Impact. Improving reliability, maintainability, and availability.
- A2.5.2.3. Safety. Reducing injury to personnel or damage to equipment.
- A2.5.2.4. Survivability. Improving survivability of an aircraft or force structure element.
- A2.5.2.5. Urgency. The necessity of test accomplishment in a specified time frame.
- A2.5.2.6. Scope. The variety of mission design series (MDS), systems, equipment, or force structure elements it impacts.
- A2.5.2.7. Tasking Level. The test requestor level (identified by HQ AFSOC/XPT).
- A2.5.3. Weight Factor. Not all the variables have the same impact; therefore, a numerical weight factor will be applied to each category.
- A2.5.4. Scoring. Scoring is the most important part of the ranking process. Each test requirement must be scored on its own merit and not in relation to another test requirement. Additionally, each voting member must maintain the same standards throughout the scoring process. Every member will evaluate each test requirement as described below and record that score on the Test Prioritization Worksheet. If a member does not feel he/she can rate a particular variable, the member can elect to abstain and place an "A" in the worksheet matrix for that variable. The member's score for that variable is the average of the other voting members scores. The following guidelines are provided to assist voting members in evaluating test requirement:
- A2.5.4.1. Mission Impact. (Weight Factor 3)
- A2.5.4.1.1. This test will have little or no impact on improving crew workload, mission accomplishment, or operational need. Score of 0-3.
- A2.5.4.1.2. This test will have a moderate impact on improving crew workload, mission accomplishment, or operational need. Score of 4-6.
- A2.5.4.1.3. This test will have a high impact on improving crew workload, mission accomplishment, or operational need. Score of 7-10.
- A2.5.4.2. Logistics Impact. (Weight Factor 1)
- A2.5.4.2.1. This test will have little or no impact on improving the reliability, maintainability, or availability. Score of 0-3.
- A2.5.4.2.2. This test will have a moderate impact on improving the reliability, maintainability, or availability. Score of 4-6
- A2.5.4.2.3. This test will have a high impact on improving the reliability, maintainability, or availability. Score of 7-10
- A2.5.4.3. Safety. (Weight Factor 2)
- A2.5.4.3.1. This test will have little or no impact on improving safety. Score of 0-3.

- A2.5.4.3.2. This test will have a moderate impact on improving safety. Score of 4-6
- A2.5.4.3.3. This test will have a high impact on improving safety. Score of 7-10
- A2.5.4.4. Survivability. (Weight Factor 2)
- A2.5.4.4.1. This test will have little or no impact on improving the survivability of the aircraft or force structure element. Score of 0-3.
- A2.5.4.4.2. This test will have a moderate impact on improving the survivability of the aircraft or force structure element. Score of 4-6.
- A2.5.4.4.3. This test will have a high impact on improving the survivability of the aircraft or force structure element. Score of 7-10.
- A2.5.4.5. Urgency. (Weight Factor 3)
- A2.5.4.5.1. No urgent or compelling need exists to accomplish this test. Score of 0-3.
- A2.5.4.5.2. A moderate need exists to accomplish this test. Score of 4-6.
- A2.5.4.5.3. An imperative need exists to accomplish this test. Score of 7-10.
- A2.5.4.6. Scope. (Weight Factor 1)
- A2.5.4.6.1. Test will benefit only one MDS or force structure element. Score of 0-3.
- A2.5.4.6.2. Test will benefit 2-3 MDSs or force structure elements. Score of 4-6.
- A2.5.4.6.3. Test will benefit 4 or more MDSs or force structure elements. Score of 7-10.
- A2.5.4.7. Tasking Level. (Weight Factor 2) This variable is based on who is requesting the test. HQ AFSOC/XPT identifies the tasking level rating.
- A2.5.4.7.1. A rating of 3 is assigned if the test was requested by an agency outside AFSOC or USSOCOM channels.
- A2.5.4.7.2. A rating of 6 is assigned if an AFSOC directorate or AFSOC wing/group commander requested the test.
- A2.5.4.7.3. A rating of 10 is assigned if the Joint Staff, HQ USAF, HQ USSOCOM, JSOC, or AFSOC/CC requested the test.
- A2.5.5. Range. If the individual scores for a variable have a range difference of five or more, e.g., the lowest score is two and the high score is a seven, the variable will be reconsidered for rescoring. The TPB will then discuss the reason for the different scores. If after the discussion the voting members still feel their score is valid, then the scores will stand.